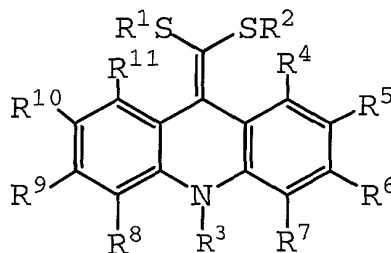


WHAT IS CLAIMED IS:

1. A compound of the formula:



wherein R<sup>1</sup> and R<sup>2</sup> are independently selected from alkyl, substituted alkyl, aryl, substituted aryl, aralkyl and substituted aralkyl groups of 1-20 carbon atoms and can be joined together to form a ring, each of R<sup>4</sup> to R<sup>11</sup> is independently a substituent which can contain from 1 to 50 atoms selected from C, H, N, O, S, P, Si and halogen atoms, and R<sup>3</sup> is selected from alkyl, substituted alkyl, aryl, substituted aryl, aralkyl and substituted aralkyl groups.

2. The compound of Claim 1 wherein at least one of R<sup>4</sup> to R<sup>11</sup> is selected from alkyl, alkoxy, halogen, amino, or amino substituted with one or two alkyl or aryl groups and the remaining of R<sup>4</sup> to R<sup>11</sup> are hydrogen.

3. The compound of Claim 1 wherein each of R<sup>4</sup> to R<sup>11</sup> is a hydrogen atom.

4. The compound of Claim 1 wherein R<sup>3</sup> is selected from methyl, phenyl, benzyl, substituted benzyl, 2-naphthyl, and p-anisyl groups.

5. The compound of Claim 1 wherein at least one of  $R^1$  and  $R^2$  is selected from alkyl substituted with a group selected from sulfonate salt groups, sulfate salt groups, phosphonate salt groups, phosphate salt groups, carboxylate salt groups and ammonium salt groups and phosphonium salt groups.

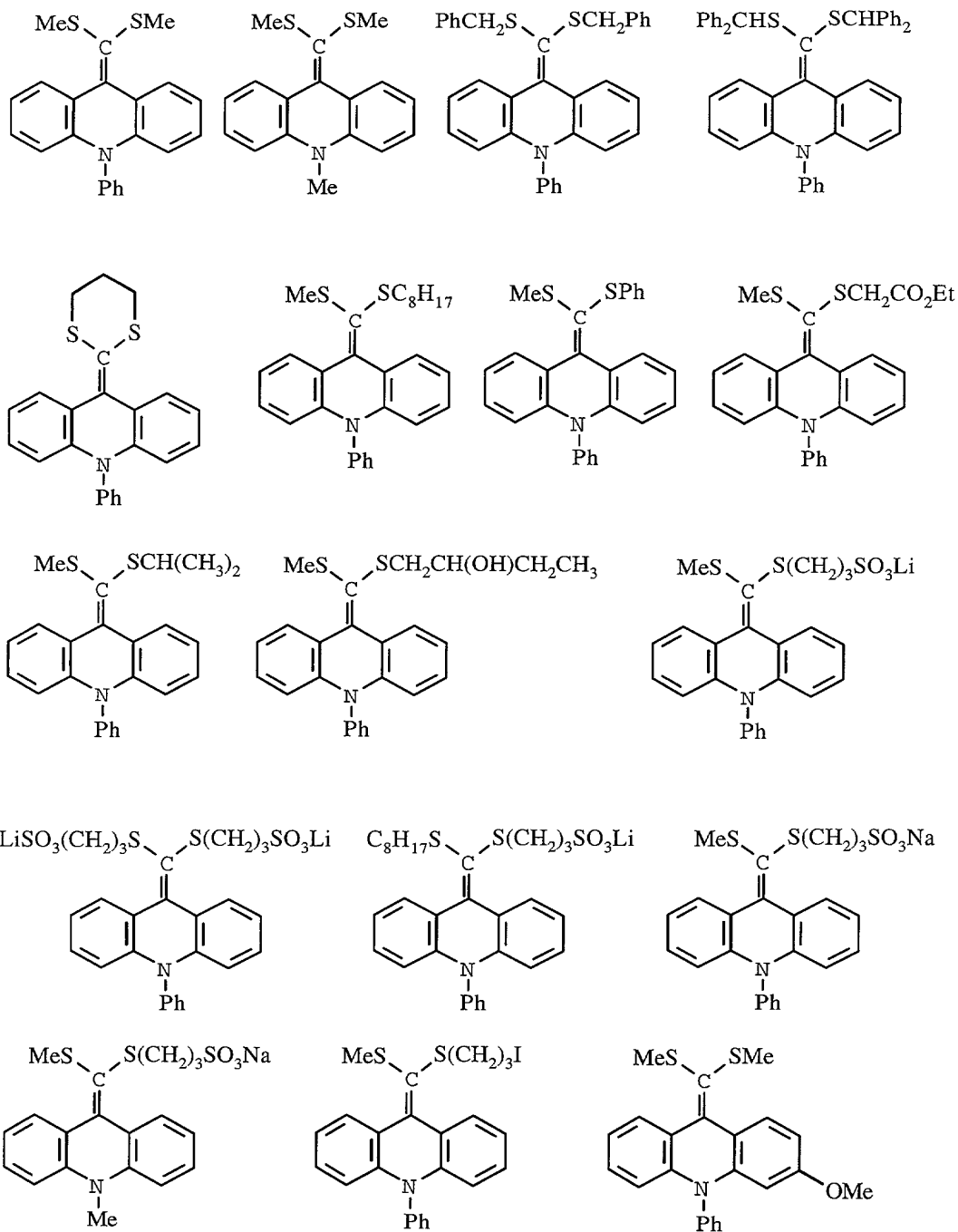
6. The compound of Claim 5 wherein at least one of  $R^1$  and  $R^2$  is an alkyl group substituted with a sulfonate salt group.

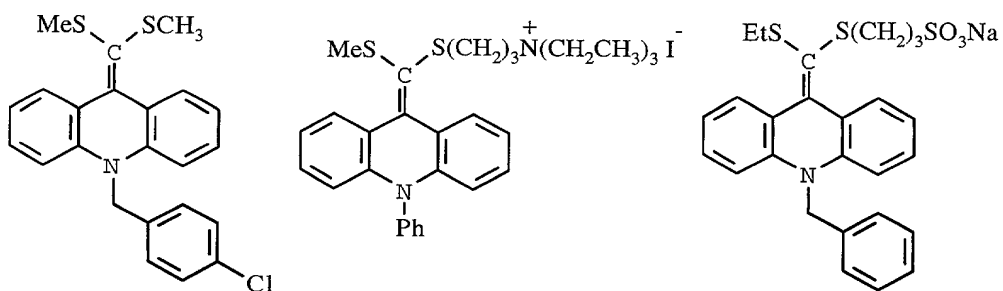
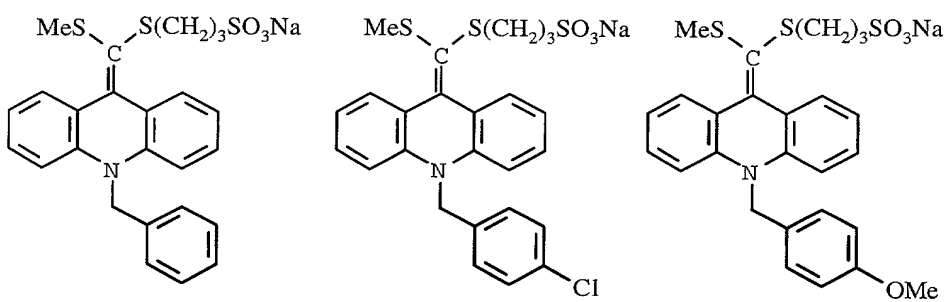
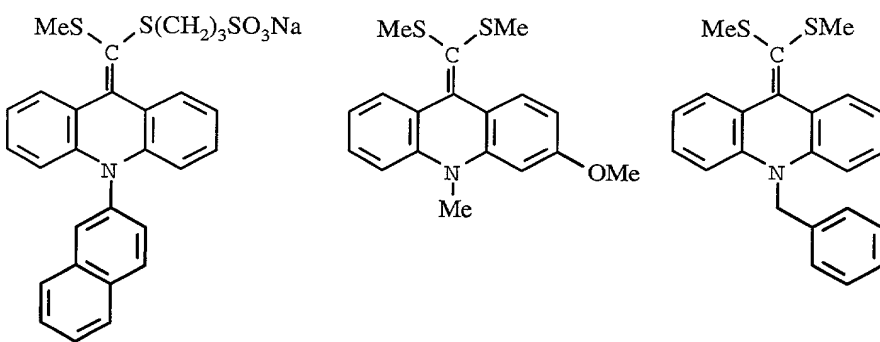
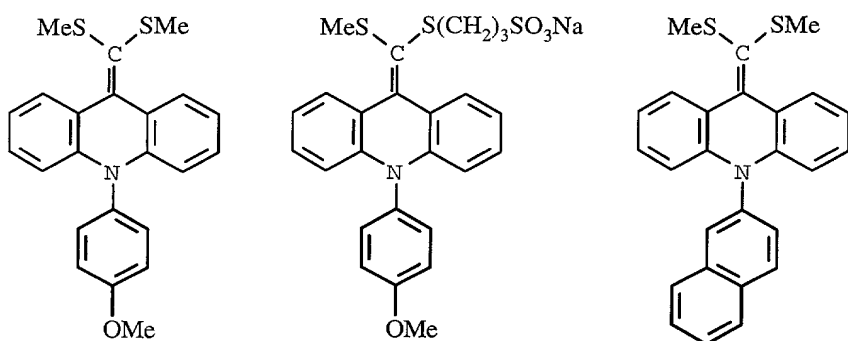
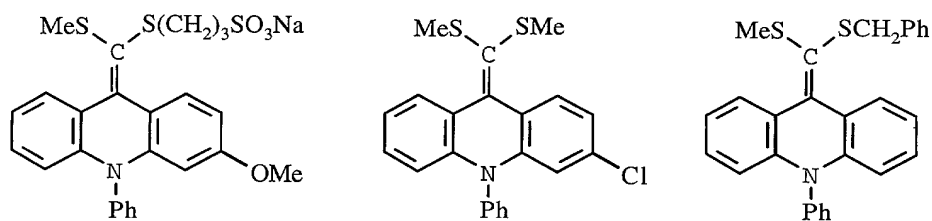
7. The compound of Claim 5 wherein at least one of  $R^1$  and  $R^2$  is an alkyl group substituted with a phosphate salt group.

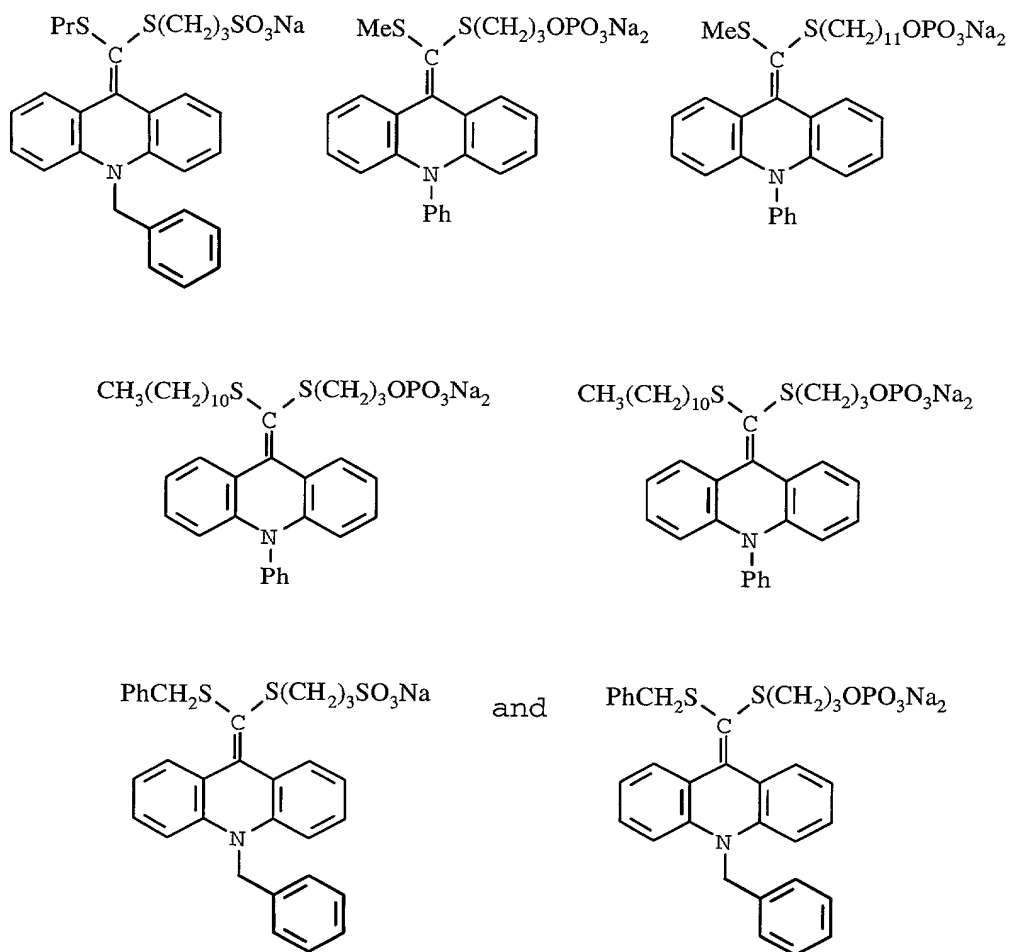
8. The compound of Claim 6 wherein  $R^3$  is selected from phenyl, substituted phenyl, benzyl, and substituted benzyl groups.

9. The compound of Claim 7 wherein  $R^3$  is selected from phenyl, substituted phenyl, benzyl, and substituted benzyl groups.

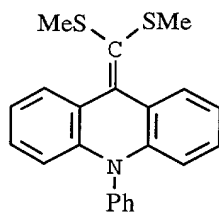
10. The compound of Claim 1 selected from the group





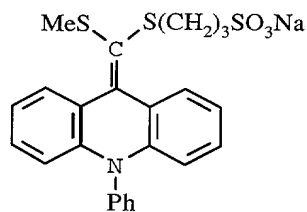


11. The compound of Claim 10 which has the formula:



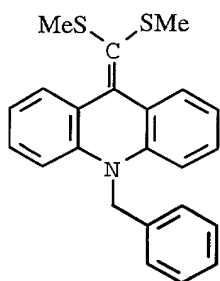
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12. The compound of Claim 10 which has the formula:



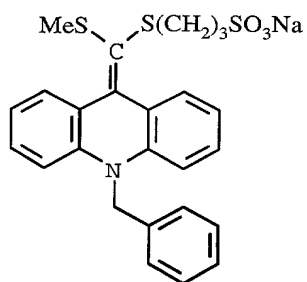
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13. The compound of Claim 10 which has the formula:



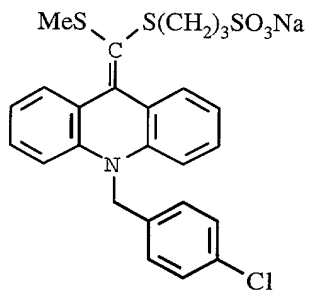
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14. The compound of Claim 10 which has the formula:



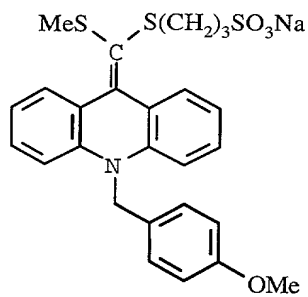
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15. The compound of Claim 10 which has the formula:



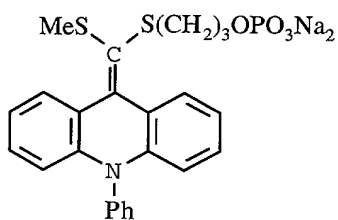
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16. The compound of Claim 10 which has the formula:

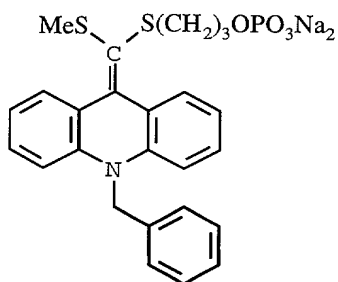


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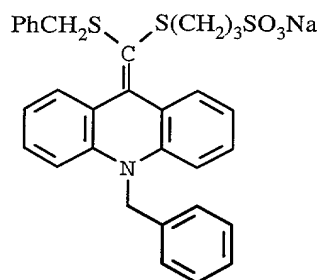
16. The compound of Claim 10 which has the formula:



17. The compound of Claim 10 which has the formula:



18. The compound of Claim 10 which has the formula:



19. The compound of Claim 10 which has the formula:

